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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/830,167	04/22/2004	Gerhard Ehmig	DT-6797	8102
30377	7590	07/25/2006		EXAMINER
DAVID TOREN, ESQ. ABELMAN FRAYNE & SCHWAB 666 THIRD AVENUE NEW YORK, NY 10017-5621			RADI, JOHN A	
			ART UNIT	PAPER NUMBER
			3641	

DATE MAILED: 07/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/830,167	EHMIG ET AL.
	Examiner	Art Unit
	John A. Radi	3641

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 22 May 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-18 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>5/22/06</u>	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Response to Arguments

Applicant's arguments regarding the 102 and 103 rejections with respect to claims 1-16 have been considered but are moot in view of the new ground(s) of rejection based on the amended claims.

Applicant's arguments regarding the 112 rejections of claims 1-17 have been considered and are persuasive. The enablement rejection regarding claims 1-17 has been withdrawn.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claim 17 is also rejected under 35 U.S.C. 102(b) as being anticipated by MacVicar (US 6247626) as described in the office action of February 22, 2006.

MacVicar teaches an explosion-driven setting tool (tool 10), comprising a setting mechanism (piston 16) driven by propellant (propane in canister 34), ignition means (82); a receptacle for holding the propellant (canister 34) receiver for canister (tool's body around canister 34), data storage identification unit (fig 23, 300), in which propellant supply level is stored (fig 23, "fuel pressure sensor"), a display (fig 23, user interface module and visual display), a data communication interface (eprom col 14, line 66 to col 15 line 15 which depicts the use of eeprom for the storage and processing

of various inputs, including vessel pressure), the data processing unit (microprocessor detailed in figure 23) data storage identification unit (fuel control circuit detailed in figure 17).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
15, 16 and 18
Claims 1-3, 6, 7, 10-13, ~~15-18~~ are rejected under 35 U.S.C. 103(a) as being unpatentable over MacVicar (US 6247626) in view of Ricordi (US 6722550) and Gore (US 6789421).

MacVicar discloses a releasably mounted propellant holder (34) for a setting tool (fig. 1), comprising a housing for receiving propellant (34); and a data identification unit (figure 23) in which supply level is stored for being read out (fig. 23, "fuel pressure sensor"). MacVicar doesn't teach wherein the propellant holder has the data storage identification unit (fig 23) affixed to said housing to be read by the data communications interface of the setting tool.

(1) Regarding the data communications interface located on the releasably mounted holder, Gore teaches a removable and interchangeable fuel cell that has fuel level readings located on the fuel cell that can be read directly by the user, or that can

be read by a data communications interface when installed in a device (figures 4-5, and col 4 lines 22-68). Gore and MacVicar are in the same field of endeavor in so far as Gore is attempting to solve the same problem identified by MacVicar, which is to determine the remaining fuel available in the fuel receptacle (MacVicar: col 14 line 66 to col 15 line 15 – use of various inputs to determine vessel pressure). Gore provides the motivation to combine, being that it provides an interface on the fuel cell that allows a user to visually determine the amount of fuel remaining amongst several fuel cells before selecting one for use, and it provides for a data communication means from the fuel cell to the device it is installed in to communicate to the tool how much fuel is remaining. Ricordi provides additional motivation to combine in so far as it is drawn to a fuel level indicator for combustion tools that tries to determine the fuel remaining based on fuel cell condition, and Gore is a solution to the same problem. Therefore it would have been obvious to one having ordinary skill in the art at the time of invention to combine Gore and MacVicar to create a combustion tool with a fuel cell indicator on the removable fuel canister.

With respect to claims 2, 6, and 15 regarding the data communications interface (microprocessor detailed in figure 23), the data storage identification unit (fuel control circuit detailed in figure 17), and the communications between the pressure indication and the data communications interface is by means of a contact element (see figures 17, 23, 31, and 34 which show in schematic view the communications path between fuel pressure sensor, processor, and fuel valves).

With respect to claims 3, wherein the data storage identification unit is formed as eeprom (col 14 line 66 to col. 15 line 15 depicts the use of eeprom or eprom for the storage and processing of various inputs, including vessel pressure).

With respect to claim 7 and 16, MacVicar teaches use of a magnetic sensor in the magazine to detect when empty and send an alert via user interface (col. 19, lines 5-16).

With respect to claim 10, an ignition means (84, 88), a receptacle for receiving the fuel vessel (see figure 1, setting tool area surrounding pressure vessel 34), a display (fig. 23, user interface module and visual display). See also Ricordi which teaches a combustion tool with a fuel level indicator based on fuel cell condition, and an indicator connected to the control unit for providing indication of fuel level (Ricordi, Abstract and fig 2).

With respect to claim 11, wherein the data processing unit (fig. 23, 300) is connected with the ignition means (see also figure 40h which details the control logic associated with a firing cycle). See also Ricordi, wherein the data processing unit (42) is connected with the ignition means (col 5 lines 35-60) for controlling the same (see Ricordi figure 4 for a schematic of the firing process).

With respect to claim 12, wherein firing of the tool isn't done until the microprocessor verifies fuel level and other necessary conditions are met (col. 26 9-40 depict the firing sequence in which the gun will not fire until several requirements are first met, including fuel pressure).

With respect to claim 13, wherein the data communications interface is located in a region of the propellant holder, while MacVicar doesn't show the location of the microprocessor and associated eeprom and control logic circuitry, wherever it is located on the body of the setting tool can be said to be "within the region" of the propellant holder which is at the rear end of the gun. See also Gore which teaches that the data communications interface is in the is in the region of the propellant holder receptacle (figures 4 and 5, wherein the interface is on the tool nearby where the fuel cell plugs in so as to read fuel cell levels when plugged in).

With respect to claims 6 and 15, wherein the data communications interface is formed as a contact element, see Gore figure 5, wherein the interface 502, reads fuel cell level by butting up against the fuel cell 504, to read fuel cell level.

Claims 4, 5, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over MacVicar as applied to claims 1, 10, 12 above, in view of Ricordi and Gore, further in view of Thomas et al. (US 20010045892).

MacVicar in view of Gore discloses the invention as described above with respect to claims 1, 2 and 10, but doesn't teach a wireless communications path between the data communications interface and the data storage unit. Thomas and MacVicar are in the same field of endeavor in so far as they are both aimed at means for determining the fuel level remaining in pressure tanks. Thomas teaches a wireless gauge alert system for use in a pressure vessel, to communicate from the pressure vessel's antennae (fig. 3b, 60) to the data communications interface (fig. 6b, 128) via wireless method (receiver 122). The motivation for combining can be found in Thomas,

which teaches the use in order to alert the user when the vessel's level gets below a predetermined alert and notify the user to change canisters (paragraph 5). Therefore, MacVicar can be combined with Thomas to provide wireless communication between the pressure vessel and the setting tool, and to notify the user when the pressure vessel must be refilled or exchanged. Therefore, it would have been obvious to one skilled in the art at the time of invention to combine Thomas and MacVicar to read on the claimed invention.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached PTO-892. In particular, examiner notes that claim 17 could have also been rejected under 35 U.S.C. 102(a) with the Ricordi as applied above with respect to claims 1-16, and 18.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John A. Radi whose telephone number is 571-272-5883. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Carone can be reached on 571-272-6873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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